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844 821 777 in the days immediately after the new or full moon. It is believed that a male birth on the night of the full moon or the next day is auspicious, but if on the day of the new moon it is more inauspicious than on any other day (Reclus 1885: 203). This belief is enshrined in the saying, "The boy born on the new moon day is bad; the girl born on the full moon day is bad." (For purposes of Badaga ritual practice, and this particular belief too, a sunset ends one day and is the beginning of the next.) A birth coming on a day between the new and the full moon is lucky; whereas one between the full and the new moon is unlucky. It is exceptionally auspicious if a *son* is born at the full moon, and luckier still if this happens to be the mother's eighth delivery (though not necessarily her eighth live birth). Under these circumstances the family will "prosper like a king's." If on the other hand it is a girl who is born at the new moon, or at her mother's eighth delivery, it is then believed that the family the child marries into will prosper, and so many will want to marry her.

[55] The unfortunate boy born on the day of the new moon is called Tippa; and a girl born at the full moon is similarly Tippe. As soon as such an unlucky child has been born it is put into an old winnow and dragged a few inches across the floor. The name Tippa means "rubbish dump," and this act symbolizes throwing the baby away as rubbish: afterwards the inauspicious birth will not have a bad effect on the family. Later, at its naming ceremony, the [553] child will be given two names so that it does not have to be called [852] by this distasteful one.

4.7. Long ago in cases of very difficult labour Badaga midwives 845 performed Caesarean operations, using the small knife that is intended for severing the umbilicus. I could not ascertain whether 752 the wound was stitched up afterwards: in those times people did not care very much whether the mother died, provided the child was born and remained alive. Now the opposite attitude prevails. Some midwives still know how to reach into a womb and remove a dead foetus. It should be noted that if a pregnant woman dies the foetus must be cut out before disposal of the mother's corpse: from this unfortunate custom some basic surgical knowledge was undoubtedly gleaned in the past.

845 218 Nowadays if a woman is having a particularly difficult labour a special mixture is prepared for her. Items used in this include dried ginger, pepper, cumin, clove, crude sugar, coffee powder,

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representing 108 protective spells that had been said while it was being made, was put round the neck of a Badaga infant to protect him from all sorts of evil and illness. Nowadays a talisman is often worn instead. It consists of a tiny sheet of copper on which a magical symbol has been engraved, placed inside a silver cover, and tied round a child's neck after a hen or goat has been sacrificed. Both of these items were made by non-Badagas living in the Coimbatore Plain. Different kinds of talisman ward off illness, possession by ghosts, "bad winds," barrenness, failure in trading, or failure in courtship. Today a talisman is only bought after a child (or occasionally an adult) has been sick, to ward off a recurrence of that illness. In the last century children's talismans were reportedly "kneaded from earth and ashes taken from funeral pyres" (Reclus 1885: 232).

164 **THERMAL BURNS: DRY** (*benda hunnu*)

5.24. Children sometimes have pus-filled swellings and rashes on the skin caused not by maladies so much as by earlier treatments. Thus one small boy reportedly had such wounds on the forehead, two over the nipples, two over the navel, two more to the right and left of it, and one on the abdomen, all caused by burning with the rhizome of the sweet flag. Girls often had slime smeared on their festering new tattoo wounds (Jagor 1876: 196; cf. 7.9).

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826 **LEUKODERMA** (*sullu*)

5.25. Albinoism occurs because the body is "overheated." Alhinos generally die in infancy, but some "ripen" till they attain the colour of their parents. The disease appears after birth, it is said, and affects either some parts or the entire body. Today only certain Kurumbas still know the plants necessary for a herbal cure, although Badagas once knew them too.

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302 **ALOPECIA AREATA** (*tare mande*)

5.26. If a newborn child has scant hair or patchiness on the head, it is shaved half-a-dozen times, and then the head-shaving ceremony is held at an unusually early age. If this does not

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improve the hair, two other procedures can be followed. Either the hair is washed, using the bark of *toreko:lu* for soap; or else some tiny buds of common bracken are ground up till they form an oily paste. This is used as a shampoo for some days when washing the baby's head.

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A disease that occurs among youngsters causes patchy baldness, as clumps of hair fall out. It is said that "insects" are eating at it and so they must be killed. A biece of hard, hairy bezoar stone, called "hair-diamond," is bought in a bazaar. It is dipped in milk and then rubbed onto the bald patch repeatedly until it bleeds. Then "the insects inside die," I was told.

ORTHODONTICS 856

5.27. "It is bad if a tooth sticks out; it is bad if a river passes beyond the river bank." Thus if a child's tooth is not growing in the right direction an older woman of the household soon tries to bend it into position. She works at this every morning after the child wakes up, and before he eats, for one or two weeks. There are two procedures: either the child sits by the fire and the tooth is held in a cloth that has been heated over the fire; or else the cloth is dipped in very cold water before use. *Ma:dua*, a mouth disease common among children, is described later (6.39).

(164)

TONSILITIS (*tonde kaṭalu*) 752 826

5.28. In earlier days some therapists grew the nails of the left thumb and index finger for use in tonsilectomy. Tonsils were taken out after they ached or swelled so much that the child could not eat. Someone pressed the back of the tongue down with a cooking skillet, so that the child could not close his mouth, while others held his head and arms to keep him still. The therapist put her thumb and index finger down the throat and pinched the tonsils off with her long sharpened nails. (They could be thrown away anywhere.) A pancake made of fresh finger millet was then prepared and kept aside until it was cool and dry. Then it was cut into small pieces and these were

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dried further. Finally the patient swallowed the pieces without chewing them first, so that their sharp edges would cut off any parts of the tonsil that remained. The pieces were swallowed before each of the next two meals following the operation. After this the patient just took the ordinary meals, but was advised to wash his mouth out with salty water for one or two days.

757 [825] COUGH (*kemmalu*)

5.29. The blood of a hare (*Lepus nigricollis*) used to be given as a throat medicine to children suffering from a cough (Thurston 1912: 85). Today the stem of a peacock feather is used instead to cure a cough or cold in young children. It is rubbed on a stone to produce a minute amount of powder, which is then mixed with powdered rhizome of the sweet flag and a little honey, and swallowed by the child. For babies, however, nothing but a half teaspoonful of honey is given, and for children between one and four years this is increased to a full teaspoonful. Only the honey from sealed cells of honeycomb is used as a cough medicine, although Badagas do use the honey from unsealed cells as a foodstuff.

755 SINGULTUS (*selamudalu*)

5.30. Someone should blow in an infant's ear to cure its hiccups. If this is not successful, then one blows on the top of its head.

757 825 PERTUSSIS (*kokkare*)

5.31. The flesh of the Nilgiri langur (*Presbytis johnii*) used to be sold in local bazaars as a cure for whooping-cough (Thurston 1906: 271); I have heard that it is still available, although illegally so since the animal became a protected species.

851 755 732 [826] [854] RICKETS (*sotte*)

5.32. If a baby is born with its limbs bent nothing can be done about it, although massage will be attempted in infancy, as we mentioned above (5.10). If it is thought there is no strength in the waist "because of the nerves in the hip," a treatment can be tried. Instead of bathing the baby in regular hot water, some water in which rice or preferably little millet, has been cleaned is kept, and each evening for a week or two this is heated for the daily

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else *kal hamiske*, a lichen, is crushed to a paste and applied to the skin.

6.2. If however it is a larger swelling it will grow bigger and another medicine, called *pattu*, must be used. It includes two roots, evening primrose and *nelahi:ssu*. These are ground up together with a half teaspoonful of turmeric rhizome, 1/4 ounce of crude sugar, the buds of the Jamaican switch sorrel, a tablespoonful of little millet, and a pinch of salt. Water is added to this mixture to yield a paste which is applied to the swelling. A small head can then be seen on it, and the paste is not put over this point. A leaf of the cutch tree is taken, and on its upper side is put some groundnut oil (in former times, gingelly oil). This leaf is held over the fire until singed brown; and in this state it is applied to the swelling, and if possible tied in place. It has to be kept there for one day, and as the medicine is usually applied during the evening the patient has to be very careful about how he lies in bed. Pus forms in the swelling, and after a while oozes out, carrying the leaf with it. If however the swelling does not break open within a day the therapist removes the leaf to look at it. If all the sides are white and the head is red, he knows that it is "ripe"; otherwise he must repeat the preceding treatment.

FURUNCLE : ABSCESS *gaːle*

When it is ripe but no pus comes out, he takes a red-hot needle and touches its point carefully on the lower side of the swelling, rather than on its head, and usually all the pus will drain out. If it does not, the swelling may become bigger. The pus continues to drain off for one or two days ; and to aid it a thread is stiffened by dipping it in turmeric paste. This is then passed through the hole that is oozing so that it will not close up. A thick coating of liquid cowdung is put all over the swelling except on the hole and the thread. As the cowdung slowly dries it causes the swelling to contract and so expels the remaining pus. For

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this purpose the fresh dung of a young cow which has never calved is preferred: Badagas can tell at a glance if it is the right kind of animal because it should digest its food well. Every four hours the therapist removes the thread, lets the pus flow, and when this stops puts the thread back in the hole. Several times a day, when the cowdung becomes too dry, a fresh coating of it is applied. The swelling should cure in two or three days by this method.

MELANOMA (*bippiri*)

6.3. If when the medicine is first applied the swelling is too big to be called a *ne:ga:le*, but it does not have a head on it, then it is a case of *bippiri*. This can in fact get started alongside a *ga : le*, if all the pus is not removed from the latter. The *bippiri* has to be treated with the bark of a tree (details unavailable).

GOITRE (*kaṇḍa ma:le*)

A goitre is punctured with red-hot needles; or else treated with thorn-apple. Other big swellings are usually cut off, especially if they fail to respond to the above-mentioned medicines. During the present century such surgery has been done with a razor, but before that a piece of broken bottle glass was used.

DEPIGMENTATION OF SKIN, OR VITILIGO (*sullu*)

6.4. Patches of white skin on the body are called *sullu*. This is a disease for which there is no medicine. It is caused by the bite of the blindworm (*Typhlops braminus*), even when the patient is unaware he has been bitten.

taddu)

6.5. Another disease which causes dry light coloured patches on the facial skin is *taddu*. Before going to sleep patients put oil on these patches. There is also another treatment: a relative takes a piece of dry cowdung, and rubs or touches it against the patches, while saying a special formula. The important thing is for the relative to be of the opposite sex to the patient, mature but unmarried, and in the relationship of a classificatory spouse—someone the patient might later want to marry (Badagas are polygynous). As this person touches

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(*gore huṇṇu*) To cure it they are washed clean with hot water and anointed with butter, or nowadays coconut oil, before the patient goes to bed. 757

ALOPECIA (*bo:le maṇḍe*) 6.9. A treatment for baldness is to rub deer's blood into the scalp. (755)

DERMATITIS VENENATA (*bava:ci turi*) 6.10. When women are gathering firewood they are careful to avoid contact with a creeper called *bava:ci*, which grows in the shade of the forest. If it is broken and its juice touches the skin, itches develop all over the body. The treatment is to touch the itching parts with *go:re* (the name of many species; cf. trilingual index), a plant that grows in damp places. After about a week the itching stops. (164)

ECZEMA (*hu:huṇṇu*) 6.11. Eczema is reportedly treated by grinding up the leaves of dead-nettle and applying the mixture with lime juice to the affected areas (Krishnamurthi 1953: 145). If there is prolonged itching on one part of the body, the skin is trimmed off and then medicine for a laceration is applied.

Lacerations

LACERATIONS (*gaiya*) 6.12. Something intolerable is referred to by the proverb, "It's like filling a wound in the stomach with salt." Another proverb emphasizes the need to take great care of lacerations: "Isn't the wound like an eye?" In general one should not interfere with a wound once it has been treated. First-aid for a cut, if there is no opportunity to get the necessary plants, is to burn an old rag and put the ashes on the wound. 752 (539)

6.13. A cut is not washed before treatment, even if it is on a dirty foot. It may indeed be tied up temporarily with a dirty cloth. Medicines to put on lacerations have changed over the years. Before the British reached the District in 1819 it was customary to use pink marsh balsam or red liberty cap plants. Later, when the geranium had been introduced into the Hills, its younger leaves were used instead. These are ground with salt and two or 752 278

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three peppercorns into paste which is bandaged onto the cut. It is said to stop a swelling and infection. For some sixty years past a third species has been used; it is the hemp agrimony, and it supposedly works quicker. Leaves of any of these four species are nowadays ground up with a pinch of salt and applied thus to the wound. A bandage is then tied over it.

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BRUISE (*kandalu*)

6.14. Badagas have no cure for blisters. If these develop on the hand a person continues to work, since his hand must toughen if he is to continue at it anyway. Similarly, no treatment is given for bruises.

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THERMAL BURNS: DRY (*benda huṇṇu*)

6.15. For a burn, the therapist grinds up leaves of *kudure ko:ku* (the name of several pennywort species), then mixes them with slime from some stagnant water, and after applying this to the wound ties a clean cloth over it.

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There is a proverb referring to saliva, oil or any similar first-aid that might cool the sensation of the burning: "He won't [even] put saliva on a burnt hand." It refers to someone too selfish to help another even to this minimal extent.

(783)

One type of burn is not treated at all. If a man returns to the Badaga community from jail, or from having been a Christian convert, he goes through a purification which includes burning the tip of the tongue with a piece of glowing charcoal or gold wire. He must simply allow the wound to heal.

6.16. Another treatment is to take one of the larger leaves of the castor-oil plant, heat it, and put it mixed with gingelly oil onto a wound.

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THERMAL BURNS: WET (*benda huṇṇu*)

6.17. For a scald the therapist grinds some prince's feather leaves and mixes them with twice that amount of some slime from stagnant water. The mixture is then applied to the scald.

Animal Bites

(136)

6.18. As every child knows, many Nilgiri animals bite. The commonest, as well as the smallest of

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136 752 these, is the flea, "which is very numerous in the early part of the monsoon. They are put to flight by [278] [drinking] an infusion of a plant called by the natives Wassumboo [*vasambu*], (*Acorus calamus*), which is indigenous in the Hills." (Baikie 1857: 110)

6.19. Badagas recognize several types of lice and tick. "All live on the dirt of the body or clothes and are spontaneously generated from it," I was told. It is therefore a shameful matter to have these parasites, when, as one proverb puts it, "Small insects are browsing on the head of an uncaring man." To prevent lice, people wash themselves [515] daily and also shave off pubic hair (cf. 2.13). Epi- [164] demics of relapsing fever have spread from time to time through the community with the help of body lice (Madras 1928: 63).

136 752 539 6.20. It is recognized that if the bites of larger animals are not cared for properly they may prove fatal, as one proverb warns: "The person scratched by a porcupine cannot return to the] village; a person scratched by a hyena cannot [return to the] yard." Also in the same vein is this one: "The man who is torn by the ibex is not for the house-yard; the man who is torn by the pig is not for the village"; in short, he is finished. The rarest biting animal, now 136 nearly extinct in the Nilgiris, is the tiger. Only tigers that are wounded in the face or suffer from other ailments that prevent them from hunting effectively will become man-eaters (Anderson 1967: *passim*).

136 752 There have been few recent cases of tigers mauling Badagas, and there is no specific treatment for such wounds beyond the above-mentioned cures for lacerations. Such treatment is also attempted when Badagas are gored by cattle, primarily buffaloes.

6.21. In a case of dog-bite a small amount of lime is put on the wound, and a small copper coin tied on top of this. The patient should not bathe for three days; on the fourth day the bandage can be removed and the wound is cured.

None but a mad jackal would bite a man. Villagers

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would then try to kill it: if they succeed the patient will recover quickly, but if they fail he will become mad too. The actual treatment is the same as for dog-bite.

6.22. It is unlikely that any Badagas have been killed by snake-bite, and the large python (*Python molurus*) is quite rare. A proverb has it that "A cobra won't kill without finding a mistake." This means that if one kicks a cobra (*Naja naja*) unintentionally it will not harm the man because he intended no harm to it. Badagas believe that snakes on the plateau are not as poisonous as those in the plains; they neither kill them nor go near a dead one (Breeks 1873: 104). If bitten by a snake one should immediately tie a tourniquet of some woman's hair, or failing that a thin creeper, around the affected limb or extremity above the swelling. This will help cure it quicker. (The same treatment is used by the Todas; Rivers 1906: 267.)

Sometimes a *mantravadi* (magician) cures snake-bite by touching a special small black stone against the wound, and then tying it there while he says some spells. Although he goes through this magical process only once it will cure the wound. After the stone has been tied to the patient he must not sleep for 24 hours, and must starve totally for the same period. Following a snake-bite water must under no circumstances touch any part of the body, and of course the patient must not walk through a stream or be in the rain.

6.23. If one pulls a bee sting out at once the swelling is small; otherwise its poison goes into the swelling. In a case of multiple stings the person must immediately pour water over the body or jump into a nearby stream. In a bad case the patient will be lethargic and have fever for up to three days; and during that time he must bathe very often in cold water. After each bath any

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available kind of oil is smoothed over the body, but without hard rubbing.

6.24. A scorpion-bite is more dangerous than a bee sting, though less so than snake-bite. The affliction cannot become too serious because only one or two scorpions might bite someone at the same time. The bite is washed and some oil put on the swelling.

Cranial Maladies

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6.25. Badagas have no knowledge of trephining, and perform no brain operations. None the less they do try to treat an aching head by external means. Thus Dr K.I. Simon describes a case of a man aged 96:

> He developed most excruciating pain in his forehead . . . This poor man got the attack every half-hour or even at shorter intervals and it lasted for ten to fifteen minutes. This goes on day and night. When the attack comes on two young men tie round his head a rope or mull and pull it as tight as they can. Thus this old man falls down on this bed and gets a short relief for some minutes . . . Then I put him on vitamin injections. After two days the pain completely disappeared. (Ketti Medical Mission 1947: 4-5)

For such severe headaches it was usual to tie a woman's upper breast-cord or a piece of cloth tightly round the cranium, and leave it thus till the headache ceased.

164 MIGRAINE
(*otte tale*)

6.26. Some people have a pain appearing on the same side of the cranium every day. It starts early in the morning, stops after the sun has passed its zenith, and then commences again the next morning. To cure this, the patient makes an oath to God, in his own home, that he will not eat one

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Eyesight

732 BAD VISION

6.29. Badagas can test their eyesight with the help of the moon. On the night of the new moon or the one after that a man is asked if he can see a small line on the lower edge of the moon while it is low in the sky. If he cannot see this, his sight is defective. He must then take a leaf of the castor-oil plant or "some other jungle plant," and keep it on the top of his head for a month, after which he is tested again. "This cure has been known to work sometimes," I am told.

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6.30. When insects and other small objects get into the eye, somebody blows on a piece of cloth—such as the corner of a loincloth — and when it is warm he wipes the surface of the sufferer's eye with it.

732 BLINDNESS (*kurudu*)

6.31. Badagas have no cure for blindness, and if the sight is defective glasses are nowadays the only normal remedy. One can even find ready-made glasses of varying prescriptions in the bazaars. It is generally believed that if one prays to the sun at sunrise while looking into it, vision will remain good. The deaf and the blind cannot enjoy life, as one proverb maintains: "For a man without ears, what use is a musical instrument? For a man without eyes, what use is the countryside?"

164 757 TRACHOMA OR CONJUNCTIVITIS (*keppu kaṇṇu*)

6.32. If the eye turns red, it is because there is too much "heat" in the body: this can be lessened by extra sleep and a change of diet. The patient should also bathe two or three times daily, using the bark of pellitory as soap: it is "cooling" to the eye and the brain, and so brings health.

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6.33. If there is a pain behind the eye, the patient lies on his back with eyes wide open. The best cure is then to squirt five to ten shots of milk directly from a buffalo's teat into his eye: failing buffalo's milk, cow's milk can be administered in the same way. (Only very gentle cattle can be trusted not to step on the patient.) A simpler but less effective treatment is for a woman to squirt five to ten shots

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of breast milk into the eye. The pain will disappear if this treatment is carried out three times, in the morning, the evening, and the next morning.

CORNEAL SCAR OR VITAMIN A DEFICIENCY (*bella kannu*) 752 (218)

6.34. A white mark may appear on the conjunctiva if a wound caused by a stick or grit is neglected for a day or more. The therapist grinds one or two seeds of coriander into a fine powder. This is put into the corner of a fine, clean, cotton cloth and the pinched-up corner dipped into woman's milk or failing that cow's milk. The patient lies flat on his back with his eyes open. After the milk has soaked into the powder for one minute one drop is squeezed from the cloth onto the white spot. If the wound is small this will be quite enough to cure it; but if necessary, treatment can be given two or three times. No more then three drops should be needed even for a large wound: one should be applied in the morning, another in the evening, and the third the next morning. As the drop is placed on the eye a helper holds the eyelids open. If not administered properly the coriander may cause the eye to sting. After receiving a drop the patient must lie still for two or three minutes with the eye closed. He must not rub it even though tears will exude.

6.35. Another treatment for a white spot on the conjunctiva involves a bud of the hill gooseberry. The therapist holds it in her clenched fist and blows through it into the patient's *ear*.

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6.36. In a more advanced case of whiteness on the conjunctiva, there is another treatment that involves a certain bud. This one is about 3 mm in diameter, and must be collected when it is very small, along with a few leaves, from a fairly dry area: if it is gathered in a swampy place it will have no curative effect. The identity of the species is a professional secret that a therapist will not disclose till on her deathbed. Were she to tell anyone, her treatment of this advanced form of white spot would never work again. (I was only able to determine that the plant looks something like oats.) The therapist keeps the

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not dry himself, but instead sits covered with a cotton cloth under which some incense is burnt to create a thick smoke. After this a cure can be expected. During the entire course of the illness the patient must eat only the "cooling" foods such as milk and fruits, and must abstain from things like chili. Also he should use no woollen material for clothing or bedding.

Mouth, Nose and Throat

6.38. Teeth are not filed in any way nor are cavities filled. If a tooth is loose, it is pulled out with the fingers, or else an attempt is made to cure it by rubbing it with ginger. There is a proverb which warns, "The son who is spurning his father is no good; the tooth that is protruding from the lips is no good." As we have seen (5.27), a woman will try to bend a child's misshapen tooth into position with a cloth.

6.39. The major mouth disease is quickly detected because a very strong odour is noticeable even from some feet away. Although mainly a children's disease, it can affect adults. Badagas believe that "germs" eat the teeth: the disease can rot them, and a sufferer cannot put anything in his mouth because it is so painful. The mouth therefore has to be made insensitive so that he can eat. A local anaesthetic is therefore made from galls found on oak, obtained from a tree in the plains: they are over 2 cms in diameter and are ground up with woman's milk or cow's milk to form a paste, which is then rubbed all over the mouth cavity.

The medicine for *ma:dua* is made from two fruits that can now be bought in shops. One is the unripe *anila kae* and the other nutmeg; they are ground together in equal amounts and mixed with woman's milk or cow's milk or else water. This solution is taken early in the morning, before breakfast, and again before the evening meal. If

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the disease is quite advanced a third dose is taken before the midday meal. After swallowing the medicine the patient must rest for at least a half hour before eating.

There is a treatment to prevent *ma:dua*, in the form of ginger rhizome. It must be rubbed on the teeth for up to an hour whenever the patient has time. If he does not take care of the mouth in this way, the disease can eat into the lip to cause hare-lip. It must be treated in the early stages because if left for even a week it can become very dangerous. Should it spread from the mouth to the stomach it can kill a child; as there is no effective medicine for *ma:dua* once it has reached the stomach.

The disease also spreads very quickly from the mouth to the nose, and can eat the nose away. Although recognized to be the same disease it is then called *pi:nasi*, and is treated with an extra medicine. This is put in the nostrils and onto the exterior by a specialist who may treat the patient for several weeks. I was unable to learn about its composition.

6.40. While *ma:dua* is not very contagious, there is another disease called *be:koko* which is highly contagious, and is passed to others on the eating and drinking vessels. It develops in the opposite way from *ma:dua*, starting in the stomach and spreading to the mouth. It is characterized by itching in the mouth, and is not very dangerous. Since the illness is caused by excessive "heat" in the body, everything possible is done to cool the body. Thus the patient has to be washed with *toreko:lu* bark to cool his head; he eats "cooling" foods; and swallows the *aṇila kae* and nutmeg powdered in milk.

TONSILITIS (*tonde kaṭalu*)

6.41. To cure swollen tonsils, a medicine made of leaves of thorn-apple is administered. In extreme cases the therapist removes the tonsils with two sharpened finger-nails of the left hand (cf. 5.28).

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Limbs

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6.42. If a "nerve" in the arm or leg gets "knotted," and cannot be straightened out by massage, then a therapist powders some salt in a mortar and applies it to the affected area. The "knot" then disappears without further treatment.

SPRAIN (*sikkalu*)

6.43. When a wrist or ankle is sprained, but not too badly, any kind of oil is rubbed into it; formerly butter or clarified butter was used. If this does not prove effective, then some Jamaican switch sorrel buds are immersed in boiling water for a minute or two (Krishnamurthi 1953: 145). The buds are then removed, placed on the sprain, and bandaged tightly in position. Theban dage is removed after 24 hours, but the buds have stuck to the skin and have to be washed off gently. This process is repeated once or perhaps twice more and the sprain will be cured.

ELEPHANTIASIS (*a:ne ka:lu*) 164

6.44. Elephantiasis, a disease in which the legs become grossly swollen, is unknown in the Nilgiri Hills, and my informant Sithamma had not heard of a cure for it either.

AMPUTATION 752

Badagas never amputate a limb, nor even damaged fingers. Even if a limb is crushed under a rock the sufferer retains it. In very rare cases a person may have to walk with one or two crutches; and in the past he would have used walking-sticks instead.

ULCERATION (*gi:vu*) 164

A doctor practising scientific medicine has reported cases of gross neglect of ulcerations on the legs of Badagas. Thus, "A Hindu boy of 16...with extensive ulceration of the right leg. It was a case of shocking neglect for over six weeks; only cowdung on green leaves had been applied as a dressing. We saw maggots in the wound...." (Ketti Medical Mission 1938:6; cf. 6.13). Women specially are the victims of this kind of suffering: "...Pannamal was carried to the hospital quite helpless. Three great abscesses on buttock and

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thigh, an ulcer on the knee and extensive cellulitis of the calf muscle caused the most excruciating pain at the slightest movement. She had been in this state at home for over a month, quite neglected by the family. . . . We opened the abscesses and gave penicillin in large doses. For over two months she had to be treated. . ." (Ketti Medical Mission 1953: 4-5).

6.45. Badaga youths once used to engage in a non-ceremonial procedure designed to strengthen their wrists so that they could manage to milk large numbers of buffalo. A fire was made by rubbing fire-sticks together, during the dry summer months when men were out on the downland grazing their herds. A helper would then take a piece of glowing charcoal and burn one or two lines across the arms just above the back of the wrists. The burns were then left to heal (Thurston 1909: 83). Something similar was done with a branding iron on the front thighs of oxen, with a view to making them strong for ploughing.

FRACTURE
(oḍeda ilu)

6.46. The Badaga technique for setting bones involves first feeling to discover whether a bone is broken. If it is, the therapist manipulates it until it is in the correct position. She then collects either Jamaican switch sorrel or eucalyptus leaves and ties a thick pad of them at the point of fracture. For a broken arm or leg two or three splints of wood are then tied along the limb, or a bamboo milk container (*aṇḍe*) is split in two for this purpose. The patient rests for three days and nights without moving the limb. After that the therapist removes the splints and leaves, and checks the fracture by manipulation. If it is not yet repaired another pad of leaves is tied on with splints for a further three days. This process may have to be repeated often, for larger bones can take a month to heal. In the case of a fractured rib, cranium or jaw, the leaves are ground up and applied as a thick paste to the fracture. A cloth is then tied over

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752 this to keep it in position for three days. After the leaves have been applied a few times, and if the fracture aches, the splints are removed and another medicament is applied daily to the fracture for eight days. This is made with eight parts of 752 liquid buffalo dung, four parts of *hulla majjige* 757 (three sorrel spp.), four parts of tamarind juice, two parts of ash, and one of salt. The dung used must come from an adult female buffalo which has never given birth. It is rubbed through a fine cloth along with the tamarind juice. The sorrel leaves are preferably boiled in water, or else ground up. In some seasons however this plant is not available ; in which case extra tamarind juice is used instead. The resultant liquid is filtered through the kitchen ash and then mixed with water. This is boiled and allowed to cool until, while still warm, it can be dabbed on the region of the fracture with a cloth. It is allowed to dry until the skin is covered with a paste. The entire procedure is followed through three times, in the morning, evening, and next morning, without the paste being washed off. Later however it is washed away and a fresh mixture made up for a further three applications. Similarly, for the entire series of medications, a new mixture is made after every third application, the quantity of it varying with the extent of the fracture.

RHEUMATISM (*baibu*)

6.47. The mixture just described is also useful for rheumatism, and for "twisted nerves." But for such ailments a single series of three applications will suffice. The medication can also be put on painful bruises, but in some cases a second series may be called for. A fomentation of the ground leaves of Jamaican switch sorrel is also reportedly in use for rheumatic pains (Krishnamurthi 1953: 145); and in the last century it was said that a man would lie outdoors, completely naked and covered in cowdung, to cure his rheumatism (Metz 1865: 87).

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164 754 6.53. Badagas sometimes attribute stomach pains to sorcery. Witness a nineteenth century account:

> . . .he complained. . .that there was a hardness in his stomach, as if there was a piece of wood in it. . .A few days after, however, I was ... informed that the man had died, and was asked to attend the funeral. On my reaching the spot, the father of the deceased begged me earnestly to open and examine the body. . ., because he and all his relations were convinced that one of the sacrificing Kurumbas had been bribed . . . to destroy the lad's life by magic. I declined to interfere, defend the poor Kurumba. . . On my repairing to the place again next morning. . .I was met by all the people, who told me that. . . on examining the ashes of the burnt corpse in their presence, the sacrificing Kurumba himself had taken from the stomach, two legs of a fowl and a piece of cactus, reduced to charcoal, and also some raw grain half consumed by the flames; which fully accounted for the violent pain in that region. . .(Metz 1864 : 121-22).

POISONING (*maddu timbadu*)

752 539 6.54. A proverb asks rhetorically, "If a man has eaten poison and is dying, will he survive if given milk?" Badagas believe that milk is not an antidote for poison, and that the only cure is to make the man vomit. This is simply achieved by forcing him to swallow cowdung mixed with onion or garlic, or alternatively a mixture of dog dung and garlic.

CONSTIPATION (*sege*)

164 752 6.55. Constipation occurs because the body is "over-heated"; it is commonly a result of eating a large plantain or the olive linden fruit. One earlier treatment called for an opium poppy head; but because of the difficulty of getting it the medicine is no longer prepared. In that treatment a poppy head was soaked in a pot of water over-

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night, after it had been carefully tied up in a cloth so that the seeds would not fall out. Although the poppy head could be green or dried it would be more effective if green. The next day it was taken out of the cloth and ground up with some milk: this mixture was swallowed by the patient very early in the morning, before taking any other food. The therapist varied the dosage according to the patient's age, and would continue the treatment if necessary for up to three days.

6.56. An alternative treatment for constipation uses the bud of the hill gooseberry or, in seasons when it has no bud, the leaf shoots. This medicine, which is more effective than the other (6.55); is also taken for one, two or three days before the first meal. As with the poppy head, these buds are ground up with milk and eaten by the sufferer. Some other medicament is tried if the condition does not clear up in three days. Castor oil is now a common laxative: one or 1½ teaspoonfuls are swallowed, and some is also put onto the rib of a tobacco leaf, which is inserted into the rectum (cf. 5.34).

HEMORRHOIDS (*mu:la*)

6.57. Piles is likewise caused by "over-heating" of the body, and therefore the patient is to be given "cooling" foods. Vegetarians eat milk products, non-vegetarians eat certain eggs and meat that are said to be "cooling." Patients also eat *nella ki:re*, an amaranth which grows wild. This is baked with clarified butter (without being first ground up), and is eaten with each meal for about a week.

If when a person defecates a hemorrhoid protrudes, the therapist puts clarified butter on a castor-oil leaf and gently pushes the protrusion back into the rectum with it. This is repeated every time the hemorrhoid appears.

DYSENTERY (*mukkalotte*)

6.58. Another ailment of the belly is said to be "very prevalent in the Badaga villages during the hot months when there is scarcity of water"

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of their experts. I have not been able to analyze individual cases, because the data were not available and I am not qualified to collect or evaluate them. What has been presented here is solely the view of Badaga medicine which some therapists have. It is not a complete emic account, for that would also have to take into consideration information provided by patients and their relatives concerning their views of illness episodes. If I were to develop a full etic account I would distinguish initially between functional disorders, parasitic ailments, nutritional diseases, and mental illness. Such a scientific categorization is cross-cut however, by the emic data, knowledge specific to Badaga culture, which offers such examples as the treatment of a functional disorder by nutritional adjustments, or parasitic ailments considered as supernatural experiences. Only on the subject of mortality was it possible to present an etic, statistical account (9.7-9.8) based on other sources than what Badagas could show and tell me.

In what follows I summarize some of their ideas on the causation and diagnosis of illness, insofar as these are reflected in their actual therapeutic practices. Nowhere in my field investigations, however, did I encounter any real systematization of these principles.

In reviewing Indian folk medicine, Khwaja Hassan (1964: 80) found that a failure to cure does not shake public belief; yet if a remedy works that is no surprise, because it was expected to. If the remedy does fail, something else is tried on the basis of a different diagnosis; but while this is true for Badagas they have a proverb counselling patience first: "Wait and see the effect of that medicine..." Another one asks: "Immediately after having drunk medicine, is it possible to get up and stand?" If the patient dies, they do not think that the treatment was inappropriate but that he was beyond help. Such attitudes may still be heard from most Badagas.

On this subject of diagnosis Hughes suggests that, "Diagnostic categories, however crude, serve the purpose of directing sustained attention and reflection to the appearance of disease syndromes, thus providing empirical data for inferences about the probable effectiveness of one type of treatment or another. Undoubtedly this constitutes a kind of inadvertent experimental approach." (Hughes 1968: 91) In a society that practices neither surgery nor postmortems other avenues for observation are closed.